

**REMARKS**

Reconsideration and allowance of this subject application are respectfully requested.

Claim 4 has been amended to eliminate the misspelling noted by the Examiner. Withdrawal of the objection to this claim is respectfully requested.

The format of claim 1 is amended to improve its readability. These amendments are not narrowing, do not surrender any subject matter, and are not for any reason related to patentability.

The Examiner applies a new reference, U.S. Patent 6,430,402 to Agahi-Kesheh. Specifically, claims 1, 3 and 8 stand rejected under 35 U.S.C. §102(e) as being anticipated by Agahi-Kesheh. This rejection is respectfully traversed.

To establish that a claim is anticipated, the Examiner must point out where each and every limitation in the claim is found in a single prior art reference. *Scripps Clinic & Research Found. v. Genentec, Inc.*, 927 F.2d 1565 (Fed. Cir. 1991). Every limitation contained in the claims must be present in the reference, and if even one limitation is missing from the reference, then it does not anticipate the claim. *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565 (Fed. Cir. 1986). Agahi-Kesheh fails to satisfy this rigorous standard.

The object of claim 1 is to determine a specific amount of electrical energy consumed from the battery in the portable in the multi-band communication device. In contrast, the object of Agahi-Kesheh is to detect and prevent saturation of a power

amplifier. See for example, column 1, lines 8-9 and column 5, lines 12-27. Figure 3 shows a block diagram of a power amplifier and associated control circuitry. The power amplifier 303 is controlled by a control signal 313 generated by a comparator 311. Comparator 311 has as one input, a power output detected by power detector 307, and as the other input, a digital control signal 319 generated by digital signal processor 321. The digital signal processor 321 supplies the digital reference signal from a stored profile representing desired power amplifier turn-on and turn-off function characteristics, which correspond to broadcasting during a Time Division Multiple Access (TDMA) time slot. The digital signal processor 321 also receives a current measurement signal 327 from the power amplifier's power supply current detector 325, which measures the current being drawn by the power amplifier 303 from the power supply 323.

Agahi-Kesheh fails to disclose the controller recited in claim 1. The Examiner never identifies what structure in Figure 3 corresponds to the claimed controller, or what structure in Figure 3 performs each of the three functions that the controller is arranged to perform. If the Examiner elects to maintain any rejection based upon Agahi-Kesheh, the Examiner is requested to identify what structure in Agahi-Kesheh the Examiner is reading the claimed controller on, as well as what specific structure in Agahi-Kesheh the Examiner is reading on each of the three functions performed by the claimed controller.

The Examiner refers to the text at column 7, lines 34-58 as allegedly describing the functions of controlling an output power level of the communication device by generating a digital control signal for the power amplifier and monitoring the digital

control signal. Applicants respectfully disagree. In column 7, Agahi-Kesheh is describing problems with powering the power amplifier when the battery discharges which may lead to control loop saturation. Applicants have been unable to identify where in this text the digital control signal 319 generated by digital signal processor 321 is monitored by the controller, presumably digital signal processor 321.

With respect to determining a specific amount of electrical energy consumed from the battery, the Examiner refers to column 8, lines 12-48. Applicants find nothing in this text describing the digital signal processor 321 as determining "a specific amount of electric energy consumed from the battery from the monitored digital control signal." Not only does the DSP 321 not monitor the digital control signal, it also does not determine a specific amount of an electric energy consumed by the battery using that monitored digital control signal. Instead, an entirely different signal, an output from the current detector 325, is used by the digital signal processor 321 to determine whether the digital reference signal 319 should be limited to a maximum value when the current detector reaches an  $I_{SAFE}$  value. Apparently, if the digital signal processor 321 limits the reference signal in this way, the power amplifier control loop will be kept out of saturation, even though the amount of power output will be less than desired. See column 8, lines 45-48. Moreover, the current drawn from the battery 323 is never even monitored to determine the amount of energy consumed. There is certainly no teaching of determining the consumed energy amount "from the monitored digital control signal."

Lacking features required in independent claim 1, the anticipation rejection based upon Agahi-Kesheh is improper and must be withdrawn.

The Examiner asserts that Agahi-Kesheh discloses the memory recited in claim 3, making reference to the text in column 8, mentioned above, and the text in column 9, lines 18-28. This latter text describes programming the radio telephone with "a series of values  $I_{SAFE}$ , each value corresponding to an  $I_{SAFE}$  for that particular battery voltage. In this way, saturation of the amplifier can be prevented even at higher than minimum battery levels." Column 9, lines 21-25. But the memory in claim 3 stores "a set of predetermined consumption values associated with different values of the digital control signal." A battery voltage is not the same as a power consumption value. Nor is the saturation prevention current  $I_{SAFE}$  the same as the claimed digital control signal for the power amplifier.

Claim 2 stands rejected under 35 U.S.C. §102(e) as being unpatentable over Agahi-Kesheh in view of previously-applied Baranowski et al. This rejection is respectfully traversed.

Baranowski is cited as disclosing the claimed digital-to-analog converter. Why would Agahi-Kesheh be modified with "the teachings of Baranowski for the purposes of obtaining desired current levels for charging the battery?" How does Baranowski's analog-to-digital converter relate to the "purpose of obtaining desired current levels for charging the battery?" Moreover, the Examiner's quoted purpose for the combination does not make sense in light of the fact that the Agahi-Kesheh reference is concerned

with power amplifier saturation prevention and not with "obtaining desired current levels for charging the battery." Thus, the Examiner has failed to supply the requisite motivation or suggestion in the prior art to make this modification/combination. *In re Rouffet*, 149 F.3d 1350, 1357-1358 (Fed. Cir. 1998).

Claim 6 stands rejected under 35 U.S.C. §103 as being patentable over Agahi-Kesheh. This rejection is respectfully traversed.

Agahi-Kesheh is already deficient because it lacks the features recited in claim 3, from which claim 6 depends. Notwithstanding the Examiner's contention that the feature of claim 6 is "well known in the art," the Examiner fails to provide any prior art teaching to support this intention. Nor has the Examiner demonstrated any motivation from the prior art why a set of predetermined consumption values, which are not even disclosed in Agahi-Kesheh, should be represented by a polynomial function. The Examiner's sole motivation is based upon hindsight. Hindsight is insufficient to present a *prima facie* case of obviousness. Evidence of this claim feature and of a proper motivation found in a prior art reference are respectfully requested.

Claim 7 stands rejected under 35 103 as being unpatentable over Agahi-Kesheh and further in view of U.S. Patent 5,838,140 to Rosenthal. This rejection is respectfully traversed.

Even though the Examiner admits that Agahi-Kesheh lacks the features recited in the claim 7, the Examiner contends that it would be obvious to modify Agahi-Kesheh with Rosenthal's graphic display of estimated remaining battery capacity. The Examiner

argues that this modification would be obvious to "give the user enough time to handle the present call appropriately." But Agahi-Kesheh is not in the same field of endeavor as Rosenthal. Agahi-Kesheh is not concerned about calculating and then displaying estimated remaining battery life. To the contrary, Agahi-Kesheh is focused on preventing saturation of the power amplifier and the power amplifier control loop. Agahi-Kesheh does not disclose a display for any purpose.

The combination of elements from nonanalogous sources, in the manner that reconstructs the Applicants' invention only with the benefit of hindsight, is insufficient to present a *prima facie* case of obviousness. *In re Oetiker*, 977 F.2d 1443 (Fed. Cir. 1992). Hindsight is the only motivation to make the modification in Agahi-Kesheh as proposed by the Examiner. But the Federal Circuit has it made clear that hindsight selection in an application of prior art must be avoided at all costs. *Union Carbide Corp. v. American Can Co.*, 724 F.2d 1567 (Fed. Cir. 1984).

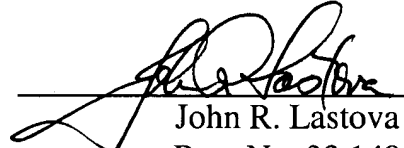
For reasons set forth above, the application is now in condition for allowance. An early notice to that effect is earnestly solicited.

PTASINSKI et al  
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Respectfully submitted,

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